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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------|------------------|
| 10/005,261 | 12/03/2001 | Willi Wissel | TRW(ASG)5988 | 9876 |
| 26294 | 7590 | 03/26/2004 | | |
| TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 526 SUPERIOR AVENUE, SUITE 1111 CLEVEVLAND, OH 44114 | | | EXAMINER BRYANT, DAVID P | |
| | | | ART UNIT 3726 | PAPER NUMBER |
| | | | DATE MAILED: 03/26/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,261

Applicant(s)

WISSEL, WILLI

Examiner

David P. Bryant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 13-19 is/are allowed.
6) ☒ Claim(s) 20 and 21 is/are rejected.
7) ☒ Claim(s) 22 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on January 20, 2004, has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerner et al. (U.S. Patent No. 6,298,750).

Claim 20: As partially shown in Figure 3, Kerner et al. teach a method of producing a skeleton for a steering wheel from sheet metal, said method comprising the following steps:

providing a flat ring-shaped metal section 17 (see column 6, lines 36-38);

forming a skeleton for a steering wheel rim by deforming said ring-shaped section in such a way that it acquires a hollow profile which in cross-section encloses an angle of more than 180 degrees (as shown in dashed lines in Figure 3, flat ring-shaped section 17 is formed into steering wheel skeleton 4b);

wherein the forming step comprises at least partially deforming said ring-shaped section in a rolling bending process.

Kerner et al. fail to explicitly teach (1) providing a flat metal blank from which the ring-shaped section is cut, and (2) moving the ring-shaped section between two rotatable rollers to form the closed cross-sectional profile.

The examiner takes Official Notice that sheet metal is not generally manufactured in circular shapes, but rather is conventionally formed into large rectangular sheets from which differently shaped pieces may be cut therefrom. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have cut the ring-shaped section of Kerner et al. from a flat metal blank, since this is the well known, conventional process for providing shaped blanks of sheet metal.

Although Kerner et al. does not explicitly disclose that the ring-shaped section is passed between rotatable rollers in the forming step, the examiner takes Official Notice that this is precisely what is done in a conventional rolling bending process. Thus, one of ordinary skill in the art would have found it obvious to perform the rolling bending process of Kerner et al. by moving the ring-shaped section between two rotatable rollers.

Claim 21: As disclosed in column 6, lines 23-25, of Kerner et al., ventilation openings 9b are stamped in the ring-shaped metal section in its flat state.

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Allowable Subject Matter

Claims 13-19 are allowed.

Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 13-19: The prior art fails to teach or fairly suggest the claimed deforming step, which includes *both* a step for drawing the ring-shaped section in such a way that it acquires an essentially U-shaped profile and moving the ring-shaped section between two rotatable rollers to produce the hollow profile which encloses an angle of more than 180 degrees.

Regarding claim 22: The prior art fails to teach or fairly suggest the claimed deforming step, wherein the flat metal blank includes a central hub section and a plurality of spoke sections interconnecting the hub section and ring-shaped section, and wherein the ring-shaped section is moved between two rotatable rollers to produce the hollow profile which encloses an angle of more than 180 degrees.

Conclusion

Telephone inquiries regarding the status of this application, or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, or fax (703) 872-9301 or by email to CustomerService3700@uspto.gov.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David Bryant** whose telephone number is **(703) 308-1859**. Draft amendments or proposed changes to the application may be faxed directly to the examiner at any time via RightFAX at (703) 746-4213 (formal inquiries or responses should NEVER be faxed to this number). The examiner can normally be reached on **Mondays-Thursdays from 6:30 AM to 5:00 PM**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The official fax phone number for the organization where this application or proceeding is 703-872-9306 for all communications (including After Final communications).

Other helpful telephone numbers are listed for applicant's benefit.

| | |
|-------------------------------|----------------------------------|
| Allowed Files & Publication | (703) 308-6789 or (888) 786-0101 |
| Assignment Branch | (703) 308-9723 |
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| Drawing Corrections/Draftsman | (703) 305-8404/8335 |
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| PCT Help Desk | (703) 305-3257 |

If the information desired is not provided above, or a number has been changed, please call the general information help line below.

| | |
|------------------------|---|
| Information Help line | 1-800-786-9199 |
| Internet PTO-Home Page | http://www.uspto.gov/ |



David P. Bryant
Primary Examiner
Art Unit 3726